

ED 012 049

CG 000 036

STRUCTURED CASE REVIEW STUDY.

BY- MUTHARD, JOHN E. MILLER, LEONARD A.
IOWA UNIV., IOWA CITY, COLL. OF EDUCATION

PUB DATE

66

EDRS PRICE MF-\$0.09 HC-\$1.48 37P.

DESCRIPTORS- *COUNSELOR EVALUATION, *REHABILITATION
COUNSELING, STATE PROGRAMS, *STATISTICAL SURVEYS, VOCATIONAL
REHABILITATION, *CASE RECORDS, RATING SCALES, *EVALUATION
TECHNIQUES, IOWA CITY, PEARSON PRODUCT MOMENT CORRELATION,
RELIABILITY ESTIMATES, INTERCORRELATIONS, STRUCTURED CASE
REVIEW BLANK (SCRB), COWORKER RATING BLANK

THIS STUDY EXAMINES A PROCEDURE FOR USING THE WRITTEN
CASE RECORD AS A CRITERION FOR EVALUATING REHABILITATION
COUNSELOR PERFORMANCE IN STATE "DVR" (STATE-FEDERAL GENERAL
VOCATIONAL REHABILITATION PROGRAM) AGENCIES. THE RESEARCHERS
OUTLINE CERTAIN OBJECTIVES (TECHNICAL, AGENCY SERVICES, AND
STAFF DEVELOPMENT) AS DESIRABLE IN THE EVALUATION PROCEDURES
OF SUCH AGENCIES. BASED UPON EARLIER WORK DESCRIBING CRITICAL
REQUIREMENTS IN REHABILITATION, THE STRUCTURED CASE REVIEW
BLANK (SCRB) WAS DEVELOPED. SUPERVISORS WERE TRAINED TO USE
THIS BLANK WHICH ASSESSED NINE AREAS OF COUNSELOR PERFORMANCE
AND FOUR ADDITIONAL ASPECTS OF CLERICAL COMPETENCE. RATINGS
OBTAINED FROM 26 SUPERVISORS OF 143 COUNSELORS WERE
INTERCORRELATED WITH EACH OTHER AND WITH OTHER CRITERIA.
RATINGS OF CASE RECORDS ARE ABOUT AS RELIABLE AS OTHER TYPES
OF RATINGS USED TO EVALUATE COUNSELOR PERFORMANCE. BECAUSE AN
ANALYSIS OF RELATIONSHIPS WITHIN THE SCRB HAS SHOWN RATHER
HIGH INTERCORRELATIONS AMONG THE DIMENSIONS, GROUPS, AND
TOTAL SCORES OF THE BLANK, SCRB RATINGS HAVE BEEN REJECTED IN
THE DIFFERENTIAL ANALYSIS OF COUNSELOR PERFORMANCE. THIS
DOCUMENT WAS PUBLISHED IN "THE CRITERIA PROBLEM IN
REHABILITATION COUNSELING" AS CHAPTER III (PP. 16-27),
APPENDIX B (PP. 71-72), APPENDIX C (PP. 73-82), APPENDIX H
(PP. 120-122), AND REFERENCES (PP. 123-129). (PS)

ED012049

THE CRITERIA PROBLEM IN REHABILITATION COUNSELING

**John E. Muthard
and
Leonard A. Miller**

**U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION**

**THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.**

**College of Education
THE UNIVERSITY OF IOWA
Iowa City, Iowa**

1966.

CG 000 036

CHAPTER III

STRUCTURED CASE REVIEW STUDY

The Nature of the Problem

An important part of our total study was the examination of a procedure for using written case records as a criterion for evaluating rehabilitation counselor performance in state DVR agencies. In planning this study, we assumed that certain objectives were desirable in the evaluation procedures of such agencies. Consequently, it may be helpful, in order to better understand why this study was undertaken, as well as the resulting information, to begin by considering what these objectives were.

1. Agency Services Objective: Evaluation of counselor performance should ultimately be based on how well the services he provides achieve agency goals as reflected in agency policy and philosophy. Such goals are the agency's reason for existence.
2. Staff Development Objective: Evaluation should permit differential analysis of counselor performance to aid him in overcoming areas of weak performance. This would also permit in-service training, state conferences, etc., to bear on any supplemental training the staff as a whole might need.
3. Technical Objective: Evaluation procedures should be as reliable and economical as is consistent with the above objectives.

Since the rehabilitation counselor's job is highly complex, descriptive research must first be done to define criteria of performance that can achieve the stated objectives of performance evaluation and are feasible for use in later research studies in such areas as selection, training, and program planning. In this study, the Structured Case Review Blank (SCRB) (Appendix B),

ratings of counselor case records on selected variables, and their relationships with other immediate and intermediate-level criteria was of central interest. The SCRB rating form was developed and studied because (1) the previous survey of Muthard and Miller (1963) revealed that DVR agencies already use case review to evaluate certain dimensions of counselor performance; however, there had been no research on this criterion; (2) we thought the SCRB might permit differential analysis of counselor performance, in keeping with the staff development objective of such evaluations; and (3) the experiences and findings from rating case material with the SCRB might indicate the feasibility of evaluating counselor performance in this manner.

Procedures of the Study

Selecting Dimensions and Format for the SCRB: The variables that were judged in the record were selected from an earlier Iowa study of critical counseling behavior. Jaques' (1959) study established the importance of these dimensions in considering the work of the rehabilitation counselor. They were placed together in three logical groups in the case review blank: Group I: Creation of a therapeutic climate - interacting; Group II: Information giving, gathering - evaluating; Group III: Structuring. Each grouping has three case service variables.

The nine case service variables required paired judgments of (1) need and (2) amount provided in particular cases. These were judged on a seven-step scale:

$$\frac{1}{\text{low}} : \frac{2}{\text{average}} : \frac{3}{\text{average}} : \frac{4}{\text{average}} : \frac{5}{\text{average}} : \frac{6}{\text{average}} : \frac{7}{\text{high}}$$

The groups and items are listed below:

Group I

1. Need to create a therapeutic climate.
2. Need to work with other agencies or professional associates.
3. Need to create a learning situation for client or significant others.

Group II

4. Need for information from others as well as client.
5. Need for giving information to client about vocations or rehabilitation facilities.
6. Need for a careful, extended evaluation of information.

Group III

7. Need to arrange for this client.
8. Need for time in this case.
9. Need to orient client to services.

An individual definition of each variable was presented to supervisors, both in small group discussions and a training manual. We also suggested the kinds of case record data upon which the amount of need and the amount of case service provided could be rated for each dimension.

It was assumed that by taking the discrepancy between scores for the amount of need and the amount of provision, a "performance index" could be derived. In a minus difference, need was judged greater than amount provided, indicating a deficient provision. In a plus difference, amount provided was judged greater than need, indicating an over-concern. Thus, scores on each variable reflect the degree to which the counselor has been deficient or over-concerned, with no discrepancy (zero difference between (1) need and (2) counselor provision ratings) indicating "perfect" performance. Performance can suffer not only in being "deficient" but also in being "over-concerned" with a service for which there is no great need.

On the front of the SCRB, we listed four aspects on which to rate the clerical handling of a case. Each was rated on a one- to seven-step scale. These were added to secure total case points. They included:

1. Clerical Detail: Whether a case was rated low or high (with four as the average) depended upon the inclusion and degree of completeness of agency forms appropriate to a case in this status. That is, medical and special examinations, psychological appraisal, social and vocational histories, financial forms, etc., had been completed with care.
2. Organization of Case: In rating this, the supervisor focused upon the degree to which the case was organized in accordance with agency directives. For example, notes, medical reports and other data were arranged to facilitate handling by any individuals who must work with the case. This was for cases as a whole.
3. Continuity of Notes: This concerned the amount of integration and continuity on case notes. The supervisors considered whether notes for different interviews and the various activities of the rehabilitation process were difficult to follow. They also evaluated how adequately the counselor reported the rationale for his actions and conclusions.
4. Currency of Notes: Since cases in various statuses (e.g. doing a medical work-up or in training) might not require current notes, the currency of notes was judged according to case status, to some extent.

Selecting Supervisors and Counselors: A major consideration for the design was that the study should permit reasonable generalization to the population of DVR agencies. Since the states are autonomous with respect to rating counselor performance, the results from one state would be rather highly restricted to that state only. Relationships between SCRB scores and other criteria could be expected to fluctuate from state to state. This would be due partly to smaller numbers involved in the analysis and partly to individual state practices. In line with this consideration, the six states used in the total criteria study were considered as one sample, representing the population of such agencies. To have been included in the overall study, a counselor must have: (1) worked at least one year for the agency; (2) worked in an office where at least two other counselors could give co-worker ratings; (3) been in the vocational rehabilitation program; and (4) not worked in a highly specialized setting with unique work tasks (e.g. mental hospital or school for the deaf).

The number of participating counselors who met these criteria was 143, with 26 supervisors. Since the assignment of ratings on the SCRB was time-consuming (about five and one-half hours per counselor), it was impractical to have all 143 counselors rated on this blank. A further sample of 56 counselors was, therefore, selected by using the Co-Worker Rating Blank (Appendix C). Those in the top or bottom 25 per cent of the counselors in each state met the first criteria. In addition, counselors were selected so that a supervisor rated no more than three. (However, in one state which had only two supervisors, each supervisor rated four counselors). Since several supervisors failed to provide ratings on clerical completeness, there were only 41 counselors rated in this area. The ratings by co-workers and supervisors, as well as Job Satisfaction Inventories (Appendix D), were usually obtained by mail, with individual "kits" made up and coded for each counselor or supervisor.

Rater Training and Case Selection: The SCRB reliability data and the training of supervisors was done in small groups. After supervisors had finished rating the sample reliability cases, they were given a supply of Structured Case Review Blanks, a manual of instruction, and asked to rate assigned counselors. Making the ratings later in their district offices, the supervisors selected nine cases from each assigned counselor's caseload, as follows. At random, three cases were selected from Status 1 cases, three cases were selected from the Service Statuses (2 through 6), and three from Pre-employment Status (usually Status 7). The total sample of nine represents about a ten per cent sample, generally, of the counselor's caseload in these statuses. The blanks were mailed directly to the investigator without computation of scores by the supervisors.

Scoring and Analysing Ratings: A counselor's case review score, for any dimension of the blank, was taken as the absolute sum of discrepancy scores across all nine cases. Scores on all variables, except two, were converted to standard scores within each state. In effect, this eliminated inter-state differences and made all converted counselor scores on any variable comparable both between and within states. Ratings given by state administrators had already been changed to percentile ranks of counselors within states and were left as percentile ranks. Structured Case Review Blank scores, available on 56 counselors, were left as given by supervisors, since the relationship of SCRB scores over states, in order to increase the generalities of the results, was of prime interest.

The SCRB scores and all other variables were plotted to inspect for linearity. Meeting the linear criterion, the case review scores were then correlated with all other variables, using the Pearson Product-Moment correlation. These correlations were for the 56 counselors who had been rated on the SCRB; however, such correlations had to be corrected since the counselors included had been selected according to Co-Worker Ratings. This was accomplished through a procedure outlined by Gulliksen (1950) and Thorndike (1949). Essentially, the task involved correcting the correlation between two variables for selection made on a third. Such a procedure yields an estimate of the correlation that would have occurred had all 143 counselors been rated.

Results

In general, this study attempted to answer the question, "Can a case record evaluation form be developed to provide a criterion for evaluating rehabilitation counselor performance in state agencies?" More specifically, it attempted to provide answers to the following questions: (1) How reliable and interrelated are dimension, group, and total scores of the SCRB criterion in evaluating rehabilitation counselor performance in state agencies? What implications can be drawn from these findings? (2) Considering dimension, group, and total scores, what is the relationship of such a criterion to other criteria of performance? What implications can be drawn from these findings?

Nine other criteria were examined in relationship to this criterion. They were: (1) co-worker ratings; (2) supervisor ratings; (3) present state ratings; (4) job satisfaction; (5) size of caseload; (6) caseload velocity; (7) number of 12 closures; (8) number of 13 closures; and (9) number of 15 closures. These variables are described in Chapter IV.

TABLE 5

ESTIMATES OF RELIABILITY FOR TOTAL AND SUBSCORES
OF STRUCTURED CASE REVIEW BLANK (N=56)¹

<u>Description of Case Review Rating</u>	<u>Between Raters Included (1)</u>	<u>Between Raters Extracted (2)</u>
(1) Creation of a therapeutic climate.	37*	49
(2) Working with other agencies or professional associates.	49	62
(3) Creating a learning situation for client or significant others.	00	39
(4) Getting information from others as well as client.	36	64
(5) Giving information to client about vocations and/or rehabilitation facilities.	30	50
(6) Doing a careful, extended evaluation.	55	71
(7) Arranging for the client.	58	72
(8) Giving sufficient time to a case.	70	76
(9) Orienting client to services.	49	71
Group I (Sum of 1, 2, 3)	57	74
Group II (Sum of 4, 5, 6)	53	71
Group III (Sum of 7, 8, 9)	59	74
TOTAL Score	64	82

¹Correlations have been corrected for selection on Co-Worker Ratings using a procedure recommended by Davis (Thorndike, 1949).

*Decimals have been omitted from correlations.

Reliability of the SCRB: Using intra-case variance as an error term, Table 5 presents the estimated reliability coefficients for dimension, group, and total scores. Actually, two error variances were identified for each case review dimension. Since, normally, only one supervisor rates a counselor, the error which includes between-rater (within-case) variance, since it includes consistent rater differences, might be considered more appropriate than the interaction variance. However, it could also be argued that if supervisors were given longer training in using the blank (in this study, they were given about one hour of training), consistent rater differences would tend to grow smaller. In this case, the error would become equivalent to interaction variance when such differences vanished. In any actual situation, therefore, it could be anticipated that the reliability coefficient would fall in the range between columns (1) and (2) of Table 5 for a given dimension score on the SCRB. This would depend partly on the amount of training and familiarity a supervisor had with the blank, as well as the care he exercised in completing it. Five actual cases, representing different ages, sex, and disability, were selected from the files of a DVR agency. With identifying information disguised, these cases were rated by all supervisors in the study; and reliability estimates were derived from the ratings of these "dummy" cases.

Table 5 reflects relatively less reliability on dimensions (1), (3), (4) and (5). The fact that ratings on dimensions (1) and (3) were made on material more difficult to define and more subjective in character probably accounts for their relatively low reliability. Ratings on dimensions (4) and (5), however, were on dimensions similar to what state supervisors often consider in their current unstructured approach to case review. Such coefficients, however, reflect relatively little reliability among supervisor ratings on what constitutes "good" counselor performance for these dimensions.

Group and total scores were relatively more reliable since they are based on scores over several dimensions. In addition, ratings on dimensions which were relatively more concrete and specific, dimensions (7) and (8), also tended to be more reliable. Of all dimension ratings, those for dimension (8), "Giving sufficient time to a case," were the most reliable in this study.

Relationships Within the SCRB: In general, research on rating forms has revealed such constant errors as halo effect, error of central tendency, logical error, contrast error, and proximity error (Guilford, 1954). The relationships which exist among the dimensions of the SCRB provide information on how such errors may be operating in this procedure.

Table 6 provides the intercorrelations, within the SCRB, of dimension scores and the total score. It is apparent from this table that scores on different dimensions within the blank have moderate to high intercorrelations and probably reflect a considerable amount of constant error.

The range of correlations in Table 6 for individual dimension scores extends from .63 to .83, with a median correlation of .73. When the intercorrelations over the five dummy cases used in the reliability study were computed, the range extended from .14 to .85, with a median of .55. The correlations of Table 6 were obtained when the supervisors knew whom they were rating and, consequently, reflect halo effect to some extent. It is reasonable to suppose, however, that halo operated to a lesser extent for the dummy cases and thus correlations were reduced in some instances.

TABLE 6
INTERCORRELATIONS AMONG CASE REVIEW DIMENSIONS SCORES
AS WELL AS TOTAL SCORE (N=56)

<u>Description of Case Review Ratings</u>	<u>Case Review Ratings</u>									
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10) ¹	
(1) Creation of a therapeutic climate.	82 [±]	77*	74 [±]	67 [±]	79	83 [±]	59	61	83	
(2) Working with other agencies or professional associates.		74	80 [±]	62	76	79	64	57	83	
(3) Creating a learning situation for client or significant others.			74 [±]	76 [±]	82	76	67 [±]	74 [±]	87	
(4) Getting information from others as well as client.				66 [±]	76 [±]	72 [±]	61 [±]	56	79	
(5) Giving information to client about vocations and/or rehabilitation facilities.					75 [±]	71 [±]	63 [±]	78 [±]	81	
(6) Doing a careful, extended evaluation.						77 [±]	75 [±]	65	88	
(7) Arranging for the client.							61	68	85	
(8) Giving sufficient time to a case.								56	73	
(9) Orienting the client to services.									75	
(10) TOTAL Score										

*Decimals have been omitted from correlations.

¹Correlations corrected for inclusion of variable.

*These correlations reflect relatively more halo effect. Significance of differences from correlations for "dummy" cases was established by (-1.64) (S.D. of Zr for N=56), in which correlations of dummy cases were treated as hypothesized values. Differences were significant at .05 level (Blalock, 1960).

Assuming that significant differences between "dummy" and "actual" inter-correlations reflect this halo effect, Table 6 indicates those dimensions which appeared most susceptible to this error. From Table 6, we note that when supervisors rate counselors they actually know - as compared to dummy cases - ratings on dimensions (4) and (5) have significantly higher correlations with most of the other ratings. Apparently, supervisor impressions of how well the counselor collects and gives information form a basis for halo effect to operate on other ratings of his written case records. Thirteen of the 19 significantly higher correlations were found on these two dimensions. It is also interesting to note that ratings on the counselor's success in "creating a therapeutic climate" had higher correlations with ratings on how well he worked with other agencies and associates, as well as arranged things for the client. Of course, halo probably operated within all dimensions to some extent, but dimensions (4) and (5) appear to be the nucleus of such halo.

We can also assume that logical error, i.e., the raters' tendency to give similar ratings for traits that seem to them to be logically related, accounted for part of the high intercorrelations within the blank. For example, dimension (2) ("Working with other agencies or professional associates") correlates quite highly (.80) with dimension (4) ("Arranging for the client") (.79). These dimensions may well have a strong logical relationship in the supervisor's mind, and thus the ratings tend to be more similar.

Because of the high intercorrelations within the blank, dimension ratings do not cluster into the groups which Jaques (1959) and we used. Tables 7 and 8 present the intercorrelations of dimension with group scores and within the group scores themselves. The system of grouping used here clearly did not meet the criterion of independence between groups. That is, ratings within a group do not appear to correlate higher with each other than with other ratings or groups. It may be that constant errors, particularly halo and logical errors, are operating to obscure such groupings, but such errors are a part of any actual rating scheme and so must be taken into account. Because of the rather uniformly high intercorrelations within the SCRB, neither cluster nor factor analysis was feasible.

The supervisors in this study also made ratings on clerical completeness - case points - for the case records selected on each counselor. (As pointed out earlier, some supervisors did not rate case points for several counselors, and consequently the number of counselors was reduced to 41). As Table 9 shows, case points or ratings on clerical completeness have moderate relationships, on the average, with ratings on other dimensions. Dimensions (1), (3) and (9) correlate significantly higher with clerical completeness than do the other dimensions. Since dimensions (1), (3) and (9) were more difficult to define and rate, we might conjecture that supervisors confronted with ambiguous rating dimensions tended to rely on how completely the counselor filled out forms, made note entries, etc.

Relationships Between SCRB Ratings and Nine Criteria: Up to now, the analysis has focused on the blank itself. In this section, however, ratings on the SCRB are intercorrelated with nine other criteria of counselor performance. Examination of Table J (Appendix H) reveals that overall case review ratings do not correlate with other criteria. In only one instance, that of "Orienting the client to services" and "Supervisor ratings," was a significant correlation found.

TABLE 7
CORRELATIONS OF CASE REVIEW DIMENSION SCORES
WITH GROUP SCORES (N=56)

<u>Description of Case Review Ratings</u>	<u>Groups¹</u>		
	<u>I</u> Sum of 1, 2, 3	<u>II</u> Sum of 4, 5, 6	<u>III</u> Sum of 7, 8, 9
(1) Creation of a therapeutic climate.	86*	81	77
(2) Working with other agencies or professional associates.	83	80	76
(3) Creating a learning situation for client or significant others.	78	86	83
(4) Getting information from others as well as client.	82	74	72
(5) Giving information to client about vocations and/or rehabilitation facilities.	73	76	82
(6) Doing a careful, extended evaluation.	85	84	84
(7) Arranging for the client.	86	82	73
(8) Giving sufficient time to a case.	68	75	64
(9) Orienting the client to services.	69	75	68

*Decimals have been omitted from correlations.

¹Correlations corrected for inclusion of variable.

TABLE 8

**INTERCORRELATIONS AMONG CASE REVIEW GROUP SCORES
AS WELL AS TOTAL SCORE (N=56)**

<u>Description of Case Review Ratings</u>	<u>Group II</u>	<u>Group III</u>	<u>Total</u> ¹
<u>Group I</u>	89*	85	89
(1) Creation of a therapeutic climate.			
(2) Working with other agencies or professional associates.			
(3) Creating a learning situation for client or significant others.			
<u>Group II</u>		89	93
(4) Getting information from others as well as client.			
(5) Giving information to client about vocations and/or rehabilitation facilities.			
(6) Doing a careful, extended evaluation.			
<u>Group III</u>			90
(7) Arranging for the client.			
(8) Giving sufficient time to a case.			
(9) Orienting the client to services.			

*Decimals have been omitted from correlations.

¹Corrected for inclusion of variable.

TABLE 9
CASE REVIEW DIMENSION SCORES AND TOTAL SCORE
WITH CASE POINTS (N=41)

<u>Description of Case Review Ratings</u>	<u>Case Points</u>
(1) Creation of a therapeutic climate.	57* [‡]
(2) Working with other agencies or professional associates.	33
(3) Creating a learning situation for client or significant others.	53 [‡]
(4) Getting information from others as well as client.	36
(5) Giving information to client about vocations and/or rehabilitation facilities.	39
(6) Doing a careful, extended evaluation.	37
(7) Arranging for the client.	43
(8) Giving sufficient time to a case.	25
(9) Orienting the client to services	54 [‡]
TOTAL Score	50

*Decimals have been omitted from correlations.

[‡]Correlations significantly higher (.05) than others in table. Significance established through a procedure developed by Hotelling (Blalock, 1960)

Since supervisors gave both ratings and SCRB scores, it is surprising that additional SCRB ratings did not correlate significantly with the overall supervisor ratings. One could anticipate that constant errors, as was the case within the blank itself, would tend to raise the correlations between case review scores and ratings given by the same supervisors. The unreliability in both criteria attenuated the correlations. In addition, the two ratings were many times given months apart and in different forms. Consequently, two different views of the counselor were elicited: one a global rating based upon previous impressions, the other upon assessment of case records on structured dimensions.

Group and total scores of the SCRB do not correlate to any extent with the nine other criteria (Table K, Appendix H). The correlations between case points and scores on the nine criteria showed only one significant relationship. Present state ratings correlated .32 with case points (Table L, Appendix H).

Summary

Based upon earlier work describing critical requirements in rehabilitation counseling, a case review blank, the SCRB, was developed. Supervisors were trained to use this blank which assessed nine areas of counselor performance and four additional aspects of clerical competence. Ratings obtained from 26 supervisors for 143 counselors were intercorrelated with each other and nine other criteria.

Ratings of case records for evaluating counselor performance seem, in general, about as reliable as ratings used in other contexts (Guilford, 1954; Taylor and Hastman, 1956); that is, the average inter-rater correlation was between .50 to .60. Analysis of relationships within the SCRB has shown rather high intercorrelations among the dimensions, groups, and total scores of the blank. Such high intercorrelations require the rejection of SCRB ratings for differential analysis of counselor performance. Ratings on clerical completeness tend to have moderate correlations with other ratings on the SCRB. Structured Case Review Blank ratings do not correlate with other criteria examined in this study.

APPENDIX B

STRUCTURED CASE-REVIEW BLANK

Identifying data:

Sample no. _____ Case no. _____ Status _____

Total D-Score

-	+

Counselor's Name _____

Clerical Handling:

1. Clerical detail

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
low	average				high	

2. Organization of case

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
low	average				high	

3. Continuity of Notes

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
low	average				high	

4. Currency of Notes

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
low	average				high	

Therapeutic Climate, Interaction

THE NEED FOR CREATING A THERAPEUTIC CLIMATE IS: 1 2 3 4 5 6 7
 low average high

- Data: 1) Reports showing personality problem
 2) Agency forms for overview

THE AMOUNT OF THIS CASE-SERVICE PROVIDED: 1 2 3 4 5 6 7
 low average high

- Data: 1) Explicit recognition in notes
 2) A plan to provide it

THE NEED TO WORK WITH OTHER AGENCIES OR
 PROFESSIONAL ASSOCIATES IS: 1 2 3 4 5 6 7
 low average high

- Data: 1) Requests for cooperation from others
 2) Needs of client your agency can't meet
 3) Whether or not client is involved with other agencies

THE AMOUNT OF THIS CASE-SERVICE PROVIDED: 1 2 3 4 5 6 7
 low average high

- Data: 1) How well material needs are being met
 2) Notes and letters reflecting cooperation

THE NEED TO CREATE A LEARNING SITUATION FOR CLIENT
 SIGNIFICANT OTHERS IS: 1 2 3 4 5 6 7
 low average high

- Data: 1) Client's lack of prevocational skills
 2) Lack of understanding by others

THE AMOUNT OF THIS CASE-SERVICE PROVIDED 1 2 3 4 5 6 7
 low average high

- Data: 1) Recognition of necessary skills to be learned
 2) A plan to provide instruction and information to others

Group I D-Score

-	+

Turn blank over to continue

Group II -- Information Giving, Gathering, Evaluating

4. a) THE NEED FOR INFORMATION FROM OTHERS AS WELL

AS CLIENT IS: 1 : 2 : 3 : 4 : 5 : 6 : 7
 low average high

Data: 1) Has problems that cannot be solved
 without information

2) Vagueness to case about problems and planning

b) THE AMOUNT OF THIS CASE-SERVICE PROVIDED: 1 : 2 : 3 : 4 : 5 : 6 : 7
 low average high

Data: 1) Actual reports from others or client

2) Planning to elicit information

5. a) THE NEED FOR GIVING INFORMATION TO CLIENT ABOUT
VOCATIONS AND/OR REHAB. FACILITIES IS: 1 : 2 : 3 : 4 : 5 : 6 : 7
 low average high

Data: 1) Significant changes are necessary

2) Client knowledgeability

b) THE AMOUNT OF THIS CASE-SERVICE PROVIDED: 1 : 2 : 3 : 4 : 5 : 6 : 7
 low average high

Data: 1) Tours, testing, interviews, etc.

undertaken to provide information

6. a) THE NEED FOR A CAREFUL, EXTENDED EVALUATION IS: 1 : 2 : 3 : 4 : 5 : 6 : 7
 low average high

Data: 1) History of failure

2) A problem with many implications

b) THE AMOUNT OF THIS CASE-SERVICE PROVIDED: 1 : 2 : 3 : 4 : 5 : 6 : 7
 low average high

Data: 1) General manner in which counselor

logically relates features of case

Group II D-Score

-	+

Group III -- Structuring

7. a) THE NEED TO ARRANGE FOR THIS CLIENT IS: 1 : 2 : 3 : 4 : 5 : 6 : 7
 low average high

Data: 1) Level of independent action

2) Demonstrated ability to cope with similar situations

b) THE AMOUNT OF THIS CASE-SERVICE PROVIDED: 1 : 2 : 3 : 4 : 5 : 6 : 7
 low average high

Data: 1) What arranging was done

2) What planning has fallen through
 for lack of arranging

8. a) THE NEED FOR TIME IN THIS CASE IS: 1 : 2 : 3 : 4 : 5 : 6 : 7
 low average high

Data: 1) Problems arising from lack of time

b) THE AMOUNT OF THIS CASE-SERVICE PROVIDED: 1 : 2 : 3 : 4 : 5 : 6 : 7
 low average high

Data: 1) Last interview and frequency

9. a) THE NEED TO ORIENT THE CLIENT TO SERVICES IS: 1 : 2 : 3 : 4 : 5 : 6 : 7
 low average high

Data: 1) How well client should know goals

2) How well client knows the role he plays

b) THE AMOUNT OF THIS CASE-SERVICE PROVIDED: 1 : 2 : 3 : 4 : 5 : 6 : 7
 low average high

Data: 1) Amount of orientation given

2) Client actions that reflect good orientation

Group III D-Score

-	+

5. Work on one item at a time; put all numbers selected on one scale and then move to the next item.

Your reply will be held in strictest confidence; only the investigators have the coding key which identifies each blank. In our analysis of these data, neither individuals, district offices, nor states will be identifiable.

APPENDIX D

JOB SATISFACTION INVENTORY

This inventory is another part of our study into the criteria problem in evaluating the work of the rehabilitation counselor. We are sure that most would agree that satisfaction with a job is a vital component in the performance of that job. This variable we want to include in our study.

The following specific statements concern your feelings, beliefs, and attitudes. There are 70 items in this inventory. For each statement, a five-point scale is provided indicating whether you rarely, sometimes, frequently, generally, or almost always do, feel, or see others as doing as the statement suggests. Thus, for example, you would check the space "R" on the scale if you rarely engage in the activity described:

I worry a lot about my job.

R S F G A
X : ____ : ____ : ____ : ____

Or, see others as engaging rarely in an activity:

The policies and problems of the people under whom I work are adequately explained to me.

X : ____ : ____ : ____ : ____

To aid you in answering this inventory, the terms rarely, sometimes, frequently, generally, and almost always have been defined on a percentage basis, as follows:

- "R" - Rarely: means from 0 to 15 per cent of the time.
- "S" - Sometimes: means from 16 to 35 per cent of the time.
- "F" - Frequently: means from 36 to 65 per cent of the time.
- "G" - Generally: means from 66 to 85 per cent of the time.
- "A" - Almost Always: means from 86 to 100 per cent of the time.

These per cent listings have been given at the top of each page in the inventory. There are no "right" or "wrong" answers to these statements. Work as rapidly as you can without being careless, and do not spend too much time on any one statement.

"R" - Rarely (0% to 15%)

"S" - Sometimes (16% to 35%)

"F" - Frequently (36% to 65%)

"G" - Generally (66% to 85%)

"A" - Almost Always (86% to 100%)

Answer every question.

1. If I had a choice, I would choose a job in my present line of work over one in any other line of work.
2. I feel that I have an adequate understanding of what is expected of me in my job.
3. It is necessary for me to do things I dislike in order to get promotions.
4. I feel that to me others could make my work easier if they cared to do so.
5. I worry a lot about my daily work.
6. I feel if I could start over again, at 18, I would choose a different line of work.
7. I feel that people in general respect my job.
8. There are too many people telling me what to do.
9. I feel that I can always trust the people under whom I work.
10. My life would seem empty without my work to occupy me.
11. My present job requires me to work too long hours.
12. I am glad to get back to my job after a vacation.
13. I feel that I am as efficient as the average person with whom I work.
14. My work is too confining to suit me.
15. I feel I am paid a fair salary for the work I do.
16. I feel that my work utilizes my full capacities.

<u>R</u>	<u>S</u>	<u>F</u>	<u>G</u>	<u>A</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

"R" - Rarely (0% to 15%)

"S" - Sometimes (16% to 35%)

"F" - Frequently (36% to 65%)

"G" - Generally (66% to 85%)

"A" - Almost Always (86% to 100%)

Answer every question.

- | | <u>R</u> | <u>S</u> | <u>F</u> | <u>G</u> | <u>A</u> |
|---|----------|----------|----------|----------|----------|
| 17. I feel that I am "in a rut" vocationally. | _____ | _____ | _____ | _____ | _____ |
| 18. I feel that I know where I stand with my present employer. | _____ | _____ | _____ | _____ | _____ |
| 19. I feel that my work has a bad effect on my health. | _____ | _____ | _____ | _____ | _____ |
| 20. I come home upset, angry or irritable because of something that happened at work. | _____ | _____ | _____ | _____ | _____ |
| 21. I feel competent and fully able to handle my job. | _____ | _____ | _____ | _____ | _____ |
| 22. I feel my work suffers because I have too much to do. | _____ | _____ | _____ | _____ | _____ |
| 23. I would decline an opportunity to change my present job for one of equal pay, security and status. | _____ | _____ | _____ | _____ | _____ |
| 24. I think it is possible to attain my vocational goals in that portion of life that is still ahead of me. | _____ | _____ | _____ | _____ | _____ |
| 25. I feel that my family and friends respect my vocation. | _____ | _____ | _____ | _____ | _____ |
| 26. I feel there is adequate transportation available to me in going to and from work, as well as in my work when called for. | _____ | _____ | _____ | _____ | _____ |
| 27. I think I really wanted to enter my present job when I started it. | _____ | _____ | _____ | _____ | _____ |
| 28. I regard my present position as a lifetime career. | _____ | _____ | _____ | _____ | _____ |
| 29. I think my present job is in the area of work (not necessarily the same job) I wish to remain in permanently. | _____ | _____ | _____ | _____ | _____ |

"R" - Rarely (0% to 15%)	"G" - Generally (66% to 85%)
"S" - Sometimes (16% to 35%)	"A" - Almost Always (86% to 100%)
"F" - Frequently (36% to 65%)	

Answer every question.

	<u>R</u>	<u>S</u>	<u>F</u>	<u>G</u>	<u>A</u>
30. I expect my job to give me more satisfaction the longer I have it.	_____	_____	_____	_____	_____
31. I feel I have had definite adequate preparation for the job I now hold.	_____	_____	_____	_____	_____
32. I feel I have made real and lasting friends among my working associates.	_____	_____	_____	_____	_____
33. My position forces me to work with certain individuals whom I dislike.	_____	_____	_____	_____	_____
34. I get discouraged in my present job.	_____	_____	_____	_____	_____
35. I feel that my job detracts from my status in the community where I live.	_____	_____	_____	_____	_____
36. I consider my work surroundings to be as pleasant as they should be.	_____	_____	_____	_____	_____
37. I feel I have eventual retirement security in my job.	_____	_____	_____	_____	_____
38. I get restless during working hours, and feel that the day is dragging endlessly.	_____	_____	_____	_____	_____
39. I feel that there should be more people to help with the work I am doing.	_____	_____	_____	_____	_____
40. I like my present job better than any other I have ever had.	_____	_____	_____	_____	_____
41. My job gives me more real personal satisfaction than the things I do in my spare time.	_____	_____	_____	_____	_____
42. I feel my occupation forces me to live in home surroundings which are uncomfortable or inadequate according to my standards.	_____	_____	_____	_____	_____

"R" - Rarely (0% to 15%)

"S" - Sometimes (16% to 35%)

"F" - Frequently (36% to 65%)

"G" - Generally (66% to 85%)

"A" - Almost Always (86% to 100%)

Answer every question.

43. I wonder whether the people under whom I work approve of my work.
44. I think my job gets more difficult for me each year.
45. My present job gets me badly flustered and jittery.
46. The policies and problems of the people under whom I work are adequately explained to me.
47. I feel that my general interests and attitudes are about the same as those of my fellow workers who have similar jobs.
48. The method of payment of my earnings causes me inconvenience.
49. I feel at ease in the presence of the people under whom I work.
50. I am so interested in my work that I talk about it a great deal even after working hours.
51. I feel I am kept from living as I would like because of insufficient income.
52. I am satisfied with the degree to which my present job gives me an opportunity to express my own ideas.
53. I find my work so interesting that it is on my mind a lot when I am not at work.
54. I feel I have made a success of my job thus far in my career.
55. My present job forces me to maintain too fast a pace.

R S F G A

____:____:____:____:____

____:____:____:____:____

____:____:____:____:____

____:____:____:____:____

____:____:____:____:____

____:____:____:____:____

____:____:____:____:____

____:____:____:____:____

____:____:____:____:____

____:____:____:____:____

____:____:____:____:____

____:____:____:____:____

____:____:____:____:____

"R" - Rarely (0% to 15%)

"S" - Sometimes (16% to 35%)

"F" - Frequently (36% to 65%)

"G" - Generally (66% to 85%)

"A" - Almost Always (86% to 100%)

Answer every question.

- | | <u>R</u> | <u>S</u> | <u>F</u> | <u>G</u> | <u>A</u> |
|--|----------|----------|----------|----------|----------|
| 56. I feel that my working associates regard me as an equal. | _____ | _____ | _____ | _____ | _____ |
| 57. I feel that I must look outside my work for those things that make life worthwhile and interesting. | _____ | _____ | _____ | _____ | _____ |
| 58. My income is sufficient to meet my financial obligations and support my family. | _____ | _____ | _____ | _____ | _____ |
| 59. I feel that my associates stimulate me to do better work. | _____ | _____ | _____ | _____ | _____ |
| 60. I think my job has "smothered" my personality. | _____ | _____ | _____ | _____ | _____ |
| 61. My vocational future looks promising to me. | _____ | _____ | _____ | _____ | _____ |
| 62. I feel that I am really interested in my present job. | _____ | _____ | _____ | _____ | _____ |
| 63. I get along well with the persons with whom I work on my present job. | _____ | _____ | _____ | _____ | _____ |
| 64. The people under whom I work make available the materials, information and assistance required to do my best work. | _____ | _____ | _____ | _____ | _____ |
| 65. I feel that the people under whom I work make unfair demands on my free time. | _____ | _____ | _____ | _____ | _____ |
| 66. I am afraid of losing my job. | _____ | _____ | _____ | _____ | _____ |
| 67. I feel that I will become more proficient at my work the longer I have it. | _____ | _____ | _____ | _____ | _____ |
| 68. Those with whom I work seem unreasonable in their dealings with me. | _____ | _____ | _____ | _____ | _____ |
| 69. I feel my present job helps me toward the financial goals I have set for myself. | _____ | _____ | _____ | _____ | _____ |

"R" - Rarely (0% to 15%)

"G" - Generally (66% to 85%)

"S" - Sometimes (16% to 35%)

"A" - Almost Always (86% to 100%)

"F" - Frequently (36% to 65%)

Answer every question.

70. The people under whom I work are desirous of
and willing to make improvements in my working
conditions.

R S F G A
____:____:____:____:____

You may use the rest of this sheet for any comments you would like to make concerning this inventory. Thank you for your help.

APPENDIX H**TABLES**

TABLE J
CORRELATIONS OF CASE-REVIEW DIMENSION SCORES WITH NINE CRITERIA (N=56)¹

DESCRIPTION OF VARIABLES	CO- WORKER RATINGS	SUPER- VISOR RATINGS	PRESENT STATE RATINGS	JOB SATIS- FACTION	CASELOAD VELOCITY	SIZE OF CASELOAD	NUMBER	NUMBER	NUMBER
							12'S	13'S	15'S
1. Creation of a therapeutic climate.	04	14	13	13	-05	04	02	-04	-13
2. Working with other agencies or professional associates	08	-03	-11	07	07	21	-15	02	00
3. Creating a learning situation for client or significant others.	06	08	05	05	-09	14	00	-03	-05
4. Getting information from others as well as client.	04	-09	-07	04	01	16	-05	-10	00
5. Giving information to client about vocations and/or rehabilitation facilities.	11	12	11	13	-01	06	-08	-14	-06
6. Doing a careful, extended evaluation.	02	05	07	-03	-09	16	-01	-14	-11
7. Arranging for the client.	03	05	04	09	-11	13	-02	-05	-21
8. Giving sufficient time to a case.	07	02	23	-03	-05	07	-13	-16	-14
9. Orienting the client to services.	05	33*	25	17	-01	05	07	-08	00

1. Correlations have been corrected for selection on Co-Worker Ratings.

* Significant at .05 level. Significance was tested at df=54 since sampling distribution of corrected r's is unknown, but presumably more variable.

TABLE K

CORRELATION OF CASE-REVIEW GROUP AND TOTAL SCORES WITH NINE CRITERIA (N=56)¹

DESCRIPTION OF VARIABLES	CO-WORKER RATINGS		SUPERVISOR RATINGS		PRESENT STATE RATINGS		JOB SATISFACTION		CASELOAD VELOCITY		SIZE OF CASELOAD		NUMBER 12'S		NUMBER 13'S		NUMBER 15'S	
	07	07	07	02	02	09	-02	14	-05	-02	14	-05	-02	14	-05	-02	-06	
Group I																		
1. Creation of a therapeutic climate.																		
2. Working with other agencies or professional associates.																		
3. Creating a learning situation for client or significant others.																		
Group II																		
4. Getting information from others as well as client.																		
5. Giving information to client about vocations and/or rehabilitation facilities.																		
6. Doing a careful, extended evaluation.																		
Group III																		
7. Arranging for the client.																		
8. Giving sufficient time to a case.																		
9. Orienting the client to services.																		
TOTAL SCORE																		
	03	10	10	10	10	08	-03	12	07	-10	-09							

1. Correlations corrected for selection on Co-Worker Ratings.

TABLE L
CORRELATIONS BETWEEN CASE-POINTS AND NINE CRITERIA (N=41)

	CASE-POINTS
Co-Worker Ratings	15
Supervisor Ratings	28
Present State Ratings	32*
Job Satisfaction	03
Caseload Velocity	05
Size of Caseload	-22
No. of 12's	08
No. of 13's	-02
No. of 15's	07

NOTE: Decimals have been omitted from correlations.

*** Significant at .05 level.**

REFERENCES

- Apostal, R. Two methods of evaluating vocational counseling. Journal of Counseling Psychology, 1960, 7, 171-175.
- Bellows, R. Procedures for validating vocational criteria. Journal of Applied Psychology, 1941, 25, 499-513.
- Bellows, R. Psychology of personnel in business and industry. New York: Prentice-Hall, 1949.
- Bendig, A. Rater experience and case history judgments of adjustments. Journal of Clinical Psychology, 1955, 11, 127-133.
- Bendig, A., & Sprague, J. Rater experience and the reliability of case history ratings of adjustment. Journal of Consulting Psychology, 1954, 18, 207-211.
- Blalock, H. Social statistics. New York: McGraw-Hill, 1960.
- Brams, J. Counselor characteristics and effective communication in counseling. Journal of Counseling Psychology, 1961, 8, 25-30.
- Brayfield, A. H., & Crockett, W. H. Employee attitudes and employee performance. Psychological Bulletin, 1955, 52, 396-424.
- Brogden, H., & Taylor, E. The theory and classification of criterion bias. Educational and Psychological Measurement, 1950, 10, 159-186.
- Carlson, R. E., Dawis, R. V., England, G. W., & Lofquist, L. H. The measurement of employment satisfaction. Minnesota Studies in Vocational Rehabilitation, XIII. Minneapolis: Industrial Relations Center, 1962.
- Carlson, R. E., Dawis, R. V., England, G. W., & Lofquist, L. H. The measurement of employment satisfactoriness. Minnesota Studies in Vocational Rehabilitation, XIV. Minneapolis: Industrial Relations Center, 1963.

- Cohen, L. Vocational planning and mental illness. Personnel and Guidance Journal, 1955, 34, 28-32.
- Coker, D. L. A study of the effects of training residence hall advisers in interview procedures. Unpublished M.A. thesis, University of Iowa, 1961.
- Cronbach, L. J., & Gleser, G. C. Assessing similarity between profiles. Psychological Bulletin, 1953, 50, 456-473.
- Deterline, W., & Bendig, A. The interdependence of ratings of case histories. Journal of Clinical Psychology, 1956, 12, 79-82.
- DiMichael, S. G. Work satisfaction and work efficiency of vocational counselors as related to measured interests. Journal of Applied Psychology, 1949, 33, 319-339.
- Dollard, J., & Mowrer, O. A method of measuring tension in written documents. Journal of Abnormal and Social Psychology, 1947, 42, 3-32.
- Ebel, R. Estimation of the reliability of ratings. Psychometrika, 1951, 16, 407-424.
- Eddy, R. T. Interest patterns of rehabilitation counselors. Journal of Counseling Psychology, 1960, 7, 202-211.
- England, G. Development and use of weighted blanks. Dubuque, Iowa: Wm. C. Brown, 1961.
- Flanagan, J. Critical requirements: a new approach to employee evaluation. Personnel Psychology, 1949, 2, 419-425.
- Garner, W. Uncertainty and structure as psychological concepts. New York: Wiley, 1962.
- Gaylord, R. H., & Stunkel, E.R. Validity and the criterion. Educational and Psychological Measurement, 1954, 14, 294-300.
- Ghiselli, E. Differentiation of tests in terms of the accuracy with which they predict for a given individual. Educational and Psychological Measurement, 1960, 20, 675-684.
- Ghiselli, E., & Brown, C. Personnel and industrial psychology. New York: McGraw-Hill, 1955.
- Githens, W. Research findings and methodology in the United States Navy. Paper read at American Psychological Association convention, September, 1965.
- Grant, C. W. The counselor's role. Personnel and Guidance Journal, 1954, 33, 74-77.
- Guilford, J. Psychometric methods. New York: McGraw-Hill, 1954.
- Guilford, J. Fundamental statistics in psychology and education. New York: McGraw-Hill, 1961.

- Gulliksen, H. Theory of mental tests. New York: John Wiley, 1950.
- Habbe, S. Appraisal of job performance. National Industrial Conference Board Reports, No. 121. New York: Author, 1951.
- Hahn, M. E. The training of rehabilitation counselors. Journal of Counseling Psychology, 1954, 1, 246-248.
- Hansen, R. W. An investigation into the relationship of some personality characteristics with the tendency of rehabilitation counselor trainees to enter employment in a rehabilitation setting. Unpublished M.A. Equivalency, University of Iowa, 1961.
- Hall, J. H., & Warren, S. L. (Eds.) Rehabilitation counselor preparation. Washington, D.C.: National Rehabilitation Association and National Vocational Guidance Association, 1956.
- Heron, A. Satisfaction and satisfactoriness: complementary aspects of occupational adjustment. Occupational Psychology, 1954, 28, 140-153.
- Herzberg, F., Mausner, B., Peterson, R. O., & Capwell, Dora F. Job attitudes: review of research and opinion. Pittsburgh: Psychological Service of Pittsburgh, 1957.
- Hobbs, N. The development of a code of ethical standards for psychology. American Psychologist, 1958, 3, 80-84.
- Hulin, C. L., & Smith, Patricia C. Sex differences in job satisfaction. Journal of Applied Psychology, 1964, 48, 88-92.
- Jacobs, J. The application of sociometry to industry. Sociometry, 1945, 8, 181-198.
- Jaques, Marceline E. Critical counseling behavior in rehabilitation settings. Iowa City, Iowa: University of Iowa, 1959.
- Jenkins, J. Validity for what? Journal of Consulting Psychology, 1946, 10, 93-98.
- Jensen, B., Coles, G., & Nestor, B. The criterion problem in guidance research. Journal of Counseling Psychology, 1955, 2, 58-61.
- Jensen, B., Terebinski, S. J., & Ellis, W. R. The importance of criterion definition. Journal of American Society of Training Directors, 1960, 2, 3-7.
- Johnson, B. Role conflict in rehabilitation counseling. Unpublished doctoral dissertation, University of Missouri, 1961.
- Johnson, G. An instrument for the measurement of job satisfaction. Personnel Psychology, 1955, 8, 27-37.
- Johnson, R. H., & Patterson, C. H. Vocational objectives for the emotionally disabled. Journal of Counseling Psychology, 1957, 4, 291-296.

- Johnston, L. T. The counselor as he really is. Journal of Rehabilitation, 1957, 33, 9-10.
- Kahn, R. L. Productivity and job satisfaction. Personnel Psychology, 1960, 13, 275-287.
- Katzell, R. A. Personal values, job satisfaction, and job behavior. In H. Borow (Ed.), Man in a world at work. Boston: Houghton Mifflin, 1964. Pp. 341-363.
- Katzell, R. A., Barrett, R. S., & Treadway, C. Job satisfaction, job performance, and situational characteristics. Journal of Applied Psychology, 1961, 45, 65-72.
- Kelley, H.H., & Thibaut, J.W. Experimental studies of group problem solving and process. In G. Lindzey (Ed.), Handbook of social psychology. Vol. 2. Special fields and applications. Cambridge, Mass.: Addison-Wesley, 1954. Pp. 735-785.
- Kirchner, W., & Dunnette, M. Applying the weighted application blank technique to a variety of office jobs. Journal of Applied Psychology, 1957, 41, 206-208.
- Lindquist, E. F. Design and analysis of experiments. Cambridge, Mass.: Riverside Press, 1953.
- Lindzey, G., & Borgatta, E. Sociometric measurement. In G. Lindzey (Ed.), Handbook of Social psychology. Vol. 1. Theory and Method. Cambridge, Mass.: Addison-Wesley, 1954. Pp. 405-448.
- McAlees, D. C., & Warren, S. L. Increasing the supply of qualified rehabilitation counseling personnel in state vocational rehabilitation agencies. Unpublished manuscript, Vocational Rehabilitation Administration, Department of Health, Education, and Welfare, 1965.
- McGowan, J. F. The counselor as others see him. Journal of Rehabilitation, 1957, 23 (May-June), 7-9.
- Miller, L. A. A study of a case-review criterion for evaluating rehabilitation counselor performance. Unpublished doctoral dissertation, University of Iowa, 1963.
- Moed, G. Procedures and practices in pre-vocational evaluation: a review of current programs. In J. Muthard (Ed.), Proceedings of the Iowa conference on pre-vocational activities. Iowa City, Iowa: University of Iowa, 1960.
- Moriarty, E. The supervisor in a state rehabilitation agency. Journal of Rehabilitation, 1959, 25, 2, 24-25.
- Mosel, J., & Wade, R. A weighted application blank for reduction of turnover in department store sales-clerks. Personnel Psychology, 1951, 4, 177-184.

- Muthard, J. E., & Miller, L. A. Evaluation of rehabilitation counselor performance: a survey of state agency practices. Personnel and Guidance Journal, 1963, 42, 274-279.
- Muthard, J. E., & Miller, L. A. Criteria for rehabilitation counselor performance in state vocational rehabilitation agencies. Journal of Counseling Psychology, 1964, 11, 123-128.
- Nagle, B. Criterion development. Personnel Psychology, 1953, 6, 271-289.
- National Industrial Conference Board. Studies in personnel policy. Personnel Practices in Factory and Office. No. 145. New York: Author, 1954.
- Newton, R. The clinician as judge: total Rorschach and clinical case material. Journal of Consulting Psychology, 1954, 18, 248-250.
- Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. The measurement of meaning. Urbana, Ill.: University of Illinois Press, 1957.
- Patterson, C. H. Counselor or coordinator? Journal of Rehabilitation, 1957, 23 (May-June), 13-15.
- Patterson, C. H. Counseling the emotionally disturbed. New York: Harper, 1958.
- Patterson, C. H. Test characteristics of rehabilitation counselor trainees. Journal of Rehabilitation, 1962, 28, 5, 15-16.
- Remmers, H. Rating methods in research on teaching. In N. Gage (Ed.), Handbook of research on teaching. Chicago: Rand McNally, 1963. Pp. 329-378.
- Robinson, H. Job satisfaction researches of 1955. Personnel and Guidance Journal, 1956, 34, 565-568.
- Robinson, H. Job satisfaction researches of 1956. Personnel and Guidance Journal, 1957, 36, 34-37.
- Robinson, H. Job satisfaction researches of 1958. Personnel and Guidance Journal, 1959, 37, 669-673.
- Robinson, H., & Conners, R. P. Job satisfaction researches of 1961. Personnel and Guidance Journal, 1962, 41, 240-246.
- Robinson, H., & Conners, R. P. Job satisfaction researches of 1962. Personnel and Guidance Journal, 1963, 42, 136-142.
- Ross, I., & Zander, A. Need satisfaction and employee turnover. Personnel Psychology, 1957, 10, 327-338.
- Rusalew, H. An analysis of the functions of state vocational rehabilitation counselors with implications for the development of a training course at teachers college. Unpublished doctoral dissertation, Teachers College, Columbia University, 1951.

- Schubert, M. Field work performance: achievement levels of first-year students in selected aspects of casework service. Social Service Review, 1958, 32, 120-137.
- Scott, T. B., Dawis, R. V., England, G. W., & Lofquist, L. H. A definition of work adjustment. Minnesota Studies in Vocational Rehabilitation, X. Minneapolis: Industrial Relations Center, 1960.
- Scurlock, V. Supervision in state rehabilitation agencies. Journal of Rehabilitation, 1958, 24, 4, 7-9.
- Severin, D. The predictability of various kinds of criteria. Personnel Psychology, 1952, 5, 93-104.
- Sluckin, W. Combining criteria of occupational success: Part I. Occupational Psychology, 1956, 30, 20-26.
- Sluckin, W. Combining criteria of occupational success: Part II. Occupational Psychology, 1956, 30, 57-68.
- Smith, C. E. A survey of opinion upon the occupational role of the rehabilitation counselor. Unpublished doctoral dissertation, University of Missouri, 1960.
- Smits, S. J. Rehabilitation counselor recruitment study: final report. Washington, D.C.: National Rehabilitation Association, 1964.
- Spencer, G. J., & Worthington, R. Validity of a projective technique in predicting sales effectiveness. Personnel Psychology, 1952, 5, 125-144.
- Super, D. The criteria of vocational success. Occupations, 1951, 30, 5-9.
- Swineford, F. The measurement of a personality trait. Journal of Educational Psychology, 1938, 29, 295-300.
- Tate, M. Statistics in education. New York: Macmillan, 1955.
- Taylor, E., & Hastman, R. Relation of format and administration to the characteristics of graphic rating scales. Personnel Psychology, 1956, 9, 181-206.
- Thorndike, R. (Ed.). Research problems and techniques, Report No. 3, Army Air Forces Aviation Psychology Program. Washington, D.C.: Government Printing Office, 1947.
- Thorndike, R. Personnel selection. New York: John Wiley, 1949.
- Thorndike, R. Reliability. In E. Lindquist (Ed.), Educational measurement. Menasha, Wis.: George Banta, 1951. Pp. 560-620.
- Truax, W. E. Critical requirements of small school counselors. Personnel and Guidance Journal, 1956, 35, 103-106.

- Tryon, R. C. Cluster analysis. Ann Arbor, Mich.: Edward Bros., 1939.
- Vallance, T., Glickman, A. S., & Suci, G. J. Criterion rationale for a personnel research program. Journal of Applied Psychology, 1953, 37, 429-431.
- Wagner, R. F. A study of the critical requirements for dentists. Unpublished doctoral dissertation, University of Pittsburgh, 1949.
- Warren, S. L. The rehabilitation counselor today. Journal of Rehabilitation, 1959, 25, 5, 7-9.
- Wherry, R. Criteria and validity. In D. H. Fryer & E. Henry (Eds.), Handbook of applied psychology. New York: Rinehart, 1950. Pp. 170-176.
- Wherry, R. The past and future of criterion evaluation. Personnel Psychology, 1957, 10, 1-5.
- Wherry, R., & Fryer, D. H. Buddy ratings: popularity contest or leadership criteria? Sociometry, 1949, 12, 179-190.
- Wolfe, E. W. Staff evaluations: a key to effective performance. Journal of Rehabilitation, 1960, 26, 4, 19-22.
- Ziller, R. Vocational choice and utility for risk. Journal of Counseling Psychology, 1957, 4, 61-64.